Interactive Media: Rethinking the Theoretical Landscape with Regard to Audience Inputs

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Introduction

Historians will also be able to talk about the first television program or the first radio broadcast. These were milestones. The birth of color television or the development of a national network in the early 20th century is a concrete example of the beginning of new branch within the mediated world. There is something to look back on concerning the development of media and technology and how the two have gone together. What happens, though, when the birth of a new media is completely untraceable? There was no big bang in the realm of the internet, the most visible of the Interactive Media genre. It crept up to its modern day commonality after being passed around as a resource to military and academic personnel. Unlike radio or television, the internet did not have at least someone it could hold up as its inventor. There was no Philo T. Farnsworth of the internet; instead the resource gradually grew until it reached its modern levels of consumption.

For roughly a century, media has been a major part of our social dialogue. Whether as a nuance or a valuable resource, different forms of media have developed as the technology has allowed them. The long standing existence of newspapers and other print resources, spurned by increased literacy and technology, increased the desire for information. Soon live broadcasts of news and entertainment were transferred into the realm of airwaves and sound as radio began its duration. Sounds evolved into moving pictures, light and video as television developed in the mid twentieth centruy. The history of television networks have led to greater specificity, more selection and a seemingly endless line of technological advancements.

New Media, such as the internet, may find its place within this lineage shortly as it searches for the manner in which it connects into the sphere of media and technology. As the internet and other interactive media began to unravel, it offered many of the same options of the traditional print and broadcast media. News sources were reprinted; the audio and video were not only similar, but of lower quality and content. From a strictly technological-media outlook, it appeared to be only a different form of the same information.

There was no place for a new form of media that could not create a flashy addition to what was already around; if a major shift could occur like those of the past, there would have to be something fundamentally different. The internet, at its earliest stages, was merely a representation of existing content, except for one striking advantage: its immeasurable limits and instantaneous nature. The six o'clock news was suddenly moved to three in the afternoon. The New York Times was available in the earliest hours of the Hawaiian morning. While in its infancy (whenever that may have been), the internet and other forms of interactive media were merely the little cousins of other established sources. Yet, as the resource grew, it began incorporating more elements that would transform it into a phenomenon all its own.

The internet was cataloged from the beginning, making both archiving and searching the infinitely easier than with previous media. Without physical boundaries, all that was needed to reach any corner of the internet was a computer – any kind, anywhere. Therefore, every nook could be scoured until information was retrieved. This demand was met by hundreds of early sources; over time, these sources consolidated into a few

heavily utilized and resourceful search engines. Some specific agents within this field have made a severe impact in not only the internet community, but beyond.

Past research has largely focused on how individuals search for information through existing channels of media, not those which they control. The internet opens an interesting potential: when the user has the ability to become the pioneer and search media, how do the answers they seek change? This is one of the aspects of the realm of interactive media that this paper hopes to investigate.

There are several other important questions, but one of them is related to the previously mentioned lineage of media history. Is television going to lose its popularity and dominance to the new media, following the trend of its ancestors? While it may be impossible to fully investigate this argument, it is possible to take an initital look at the relationship that is being built between the internet and television. In many cases, major television networks are reaching into the new media, just as many radio stations were the pioneers in the most successful television networks. While many examples are prevalent, one that is worthy of exploring is the sports media realm.

On April 1st, 1995, the world of sports news would never be the same. It was that April morning 11 years ago when a webpage sprung up known as "ESPNet SportsZone," the forerunner to the immensely popular ESPN.com. 1.3 billion page views each month from 15.1 million unique users have shot the webpage to the popularity among a young generation obsessed with sports (ESPN, Inc. 2001).

The best example may be in the story of the Boston-based columnist. His career began nothing like a career, but the simple past time writing on his own personal webpage about the Red Sox, sports and popular culture. He grew to be recognized by the

masses of ESPN.com in 2002, and then, through his web-born popularity, ended up with a New York Times Bestseller (Bill Simmons's *Now I Can Die in Peace* is a retelling of many of the stories that he documented on the internet concerning the Boston Red Sox and the 2004 World Series). If someone like Simmons can make their way from leisure into recognized culture, it is only the tip of a blossoming arena of public media.

The accompanying television network, the self-proclaimed (but rarely disputed) "World Wide Leader of Sports," continues to enjoy its successes. The ESPN networks, owned and operated by the Walt Disney Company, are constantly the highest rated by numerous advertisers for appealing to their demographic and reach roughly 90 million households with over 5,100 hours of sports programming (ESPN, Inc, 2001). This includes the flagship show, *SportsCenter,* which boasts 88 Million viewers each month. ESPN has been launched into the vernacular of its most dominant demographic (males ages 18-49) and is constantly acknowledged for its development in that culture. The bridge between ESPN and its interactive counterpart is solid, through both the accolades of outside sources (both often receive awards from media groups) and high usage rates.

Simmons is just one example of the beginning of a crossover. The internet is becoming more a part of televised and print media just as those more traditional brands of media have begun to embrace the opportunity that the internet can create. The potential for all-access, whether free or premium, media that can be legitimized by a direct connection to an existing structure within old media grants a new realm of news, leisure and information gathering.

At the same time as a bridge is built between interactive and traditional media, some agencies are becoming productive on their own. Whereas an outlet like ESPN.com

relies on its established relationship, some sources, including Wikipedia, an open-sourced online encyclopedia, and Google, an evolved internet-marketplace born out of a power search engine, have started from scratch to become important aspects of the internet community.

The term 'open-source' is the product of computer program developers; it refers to a program (or, as is the case of Wikipedia, an information center) a source that is open to developments and changes from any user who may have access to the program, and is not protected. Most of these types of programs or sources encourage users to offer changes to the information that is present if it is for the overall betterment of the program, as long as the individual makes that change available to everyone. Wikipedia is an active community-encyclopedia which allows any user to offer changes to its articles (which are extensively fact-checked) in order to offer the most information.

Google, Inc., born in the Silicon Valley of Central California in 1998, will be elaborated in much more depth later in this study. The company offers a wide variety of sources from electronic mail to news, but it got its start in a powerful search engine which searches for information and images across the internet. The mission of the originators was to organize every web page across the World Wide Web, making its information accessible to those searching for it; the company's name is a play on words incorporating this idea. "Google" is a reference to the mathematical concept of a one followed by 100 zeros, known in those circles as a "Googol;" an astronomically large number which, like the internet, is seemingly endless (Google Press Center: Fact Sheet).

Google, in fact, has become its own pop culture revolution. Ranging from references in HBO's *Sex and the City* (as a powerful tool for investigating suitors) to

being reference in television advertisements (a recent Pontiac spot has urged users to use the search engine at its conclusion, accompanied by the Google logo). It has even spurned new vocabulary, as "Googling" becomes not only the newest verb, but the method behind the phenomenon itself.

The examples of Google, Wikipedia and ESPN.com represent only three parts of a rapidly changing sphere within New Media. Ironically, though, the boom of such sources has been unlikely and unexpected. Even within the last ten years, the internet has been viewed as widely unreliable and inaccurate, but that has not stopped the production and popularity of tools like Google or Wikipedia, or the heralded success of a media giant like ESPN.com. The effects are clear and apparent at the simplest levels of culture, where usage statistics of these organizations are showing that more and more users are becoming involved. This leads to a deceptively simple research question: Why?

This is a multi-faceted question. For instance, given both colloquial and research evidence discounting the reliability of the internet and its information breadth (Rousseau, 1999), why are the numbers of users using these devices still rising (Pew America and Life Project, 2004)? Does the wealth of knowledge across the internet, in terms of random information or breaking news, have a predictable usage pattern as it stands alone? Perhaps the most important: which way is the trend going, i.e., can the reach of the World Wide Web keep growing at faster and faster rates?

These questions may be too broad to be successfully answered through the exploratory research that is offered within this study. However, the current research offers a point of departure for their discussion. New Media is, as its name suggests, a very recent development in the face of traditional media. Even traditional media are often

considered young in terms of other fields; the interactive medium and its siblings are relatively infantile. Theoretical research in traditional media began by trying to understand with overarching mass media effects; this perspective can be ruled out with interactive media because the media content itself is highly dependent upon and variable across different users

Over explorations of some of the previously mentioned outlets, this paper attempts to initiate a conversation on the usage, effects and predictions of interactive media, specifically in the areas of information seeking and gratification. After a discussion of some of the more general trends, through an examination of the previous research and trends on search engines and Google, this study will specifically look at the usage habits of one area of 24-hour all-access information and how it factors in with traditional media.

It is the goal of this study to help understand the connections between traditional media and interactive media, in both a tangible, complementary way, as well as an investigation of the progress of a transition from the old to the new. Ultimately, the goal of this paper is to analyze the aspects of interactive media which stand alone, as well as those which are complementary to traditional forms of media. First, it will examine the independent agency of Google, in an attempt to understand how portions of the internet which are not connected to traditional media operate. This will be followed by an independent study which follows a sample of internet users and their consumption of correlated media. The discussion that leads up to that study will focus on prior research in the fields of information seeking, agenda setting, uses and gratifications, and primacy factors inherent within media.

II. The "Google" Phenomenon

How the evolution of the internet has led to new mentalities about the ways information is sought.

Summary

Before attempting to deconstruct the change in the theory that surrounds how information is received, it is important to denote the alteration that has taken place in realm of how information is sought. The core of this paper deals with the relationship of how changing the presentation of media from linear to non-linear fundamentally removes some of the primary understandings of the way in which messages created by media are received. Interestingly, one of the notions which seem to be fading is the idea of failure: information can now, more easily, be successfully found. The disadvantages of linear media created a large, tedious process to avoid error, whereas interactive media, due to its immensity and high-access levels, make the search process easier.

The waning difficulty of information "searching" has been made possible by the vast infrastructure of non-linear media coupled with the increasing amount of access to those sources. Not only has there been a concrete, physical difference between linear and non-linear realms through the development of seemingly endless digital databases, there have also been the construction of a new almost infallible ideology, the "Google" phenomenon, regarding information seeking.

The role of the information seeker, therefore, becomes altered the most when transitioning from the linear/print media to non-linear media. Print media, due to its limitations in length/duration or specificity, must make choices as to what information to

present. The key to successful message construction, therefore, is the message which most heavily can be targeted. According to Pingol and Miyazaki (2005):

> "One manner of group identification is to determine key consumer characteristics (such as location, language, education, money and time) that tend to influence *access* to various types of information or various information sources. (p. 133)

Identification based on these characteristics limits comprehension. In terms of advertising, Pingol and Miyazaki (2005) highlight how these characteristics are vital in terms of how a message reaches to its audience, targeted or not, based on the predetermined value. These specifically highlight the difference between pre-determined message constructions, which is fundamentally the strength of linear media.

The internet, as Pingol and Miyazaki point out, has not become an alternative for advertising, but has created access to the most specific areas which, because of the designed targeting of print-media, are not sought after. Print media requires that the message, when it is created, find the balance among its targets and generalness, because it has a limited opportunity to appeal to a wider variety of information seekers. Low success rates are common goals. Yet, there are even lower when comprehending how search engines are used, because the intended target can choose how they would like to receive the message.

The initial skepticism towards the reliability of web based search aids, or search engines, has been well documented. These studies focus most on the instability and irregularities inherent within the systematic method of "searching" for general concepts

within non-linear media (Rousseau, 1999). Fluctuation appears across search engines on a day-to-day basis, possibly even more frequent, therefore the consistency that comes with more traditional forms of information seeking is constantly under question. These studies, seven years in the past, are quickly becoming more difficult to replicate Rousseau's 1999 study focused on two search engines (AltaVista and NorthernLight) and how they responded to three common one-word queries. Rousseau's data indicates the changes that took place on both consecutive days (as well as higher frequencies) between the number of results. The power of search engines, and ultimately the efficient method of "information seeking" across interactive method, was rendered ultimately ineffectual. The inability to repeat the act of information seeking clearly becomes the biggest concern Rousseau, 1999).

Wouters, Helsten and Leydesdorff (2004) see the change reflected across these day-to-day capsules as a different interpretation. Functionally, Rousseau's evidence pointed to the irregularities, specifically in the research of AltaVista (interestingly, since Rousseau's study, NorthernLight has been absorbed into a large network of search engines and no longer functions independently). It shows that it requires an immediate action by the user in order to filter through the results for them to be useful (Rousseau, 1999). While Wouters, et al, acknowledge the irregularity that Rousseau discussed, they also take into account that this irregularity does not reduce credibility. The source actually functions as an internal clock to the internet, a sociological device which through its irregularity is creating a documented history at the same time. Search engines, therefore, while they are continually documenting this irregularity, are measuring it at the

same time. The fluctuation across search engine results, ironically, produces a constant measure of information.

According to Wouters (2004) “Search engines are unreliable tools for data collection for research that aims to reconstruct the historical record or for research that aims to analyze the structure of information at a particular moment in history.” (page number here) Under these circumstances, the search engine cannot be used to develop research, but that is not the goal of this study. In terms of the overall effects of how a search engine plays into the essence of information seeking, its reliability is only a factor as much as academic accuracy is the point. In terms of general use, internet users do not use search engines in order to necessarily find these results. The consumer has developed a new method of seeking information; one which can not be measured in the structure terms that Rousseau used.

Whether by way of pop culture or a revolution within the media, the new ways of using search engines, information seeking, (sometimes referred to even as the quixotic “Googling”) ideas, things or people, became vastly popular throughout the world. The services that search engines offer are no longer limited to collecting a database of desired results, but taking that database and making it *easier* to use. The newest developments over the last few years in the realm of “power searching” have had an immediate impact on the theory of how information is sought across the internet. Changes in the media of the searching tools have led to more efficiency; the results are not only organized by frequency, but by relation to the topic, translation is an automatic option to cover information outside of the vernacular language.

The times of myriad results that Rousseau uncovered are a thing of the past; the new "power search" utilizes things more than "snapshots," but the changing flow of the internet space. Wouters, et al, determined that these changes are the core of the internet, not necessarily the given information across it. In terms of the content of the pages, there is no difference; but the media itself can be governed if there is a way to capture these moments in time. That is to say, if the power search is efficient, it is a reliable clock that tells the "time" of the internet.

In addition to the skepticism voiced by Rosseau and others concerning the consistency of net searches and the credibility of results, there is also a hesitancy to trust the new forms of media. The statistics, though, from 2004, only reflect these worries in modicum amounts, specifically the former. According to the Pew Internet and America Life Project (2004) report, 56% of those online over the period of one day are using search engines; 44% of users are likely to use a search engine at least once a day. While these offer merely a glimpse at the rate of consumption of these forms of media, they, even more so, are staggering when compared to some of the other findings of the study. These include the fact that 32% of the users surveyed can't live without search engines, and only 17% ready to give up the searching devices immediately. The middle ground is still composed of the group that uses them and says they could go back to old ways of finding information only if it was required. The study summarizes these findings to two points, the positive response of internet users and the conservative, yet continued, usage of search engines as an outlet. (Pew Internet and America Life Project, 2004)

Based on the recent findings of the Pew Project, it is safe to assume that those skepticisms and fears are not widely comprehended. It reflects that variety that has not

diminished, but actually grown over the years. This can directly be coupled with the change in technology to develop a new understanding of how people search and what they expect to find.

What Makes Google Special?

What does Google do and why does it matter? The search engine, itself, offers a similar service to many of the other search engines discussed in previous research. Why have none of the others sparked thousands of companies in attempt to figure out their search methods? (Friedman, 2005) What is so special about Google that it would lead to a Franco-German *State*-endorsed alternative to the Silicon Valley juggernaut (*The Economist Technology Quarterly,* 11 March 2006)? A database and search tool has become so influential that that it has inspired opposing governments to compete: in the same way they have for years. An article in the 11 March edition of *The Economist* discusses how the development of Google and the European state-run response (known as Quaesor) is just a continuation of history. Somehow, the invention of new technology has become a history lesson at the same time, with the same themes recurring from years past. The story of Google and Quaesor may very well be another telling of the powers of American commercialism working against the semi-social-markets of Europe. The intrigue aside, these important questions are fundamentally asking how Google is finding its way into everyday life, as not only an alternative to information gatherers, but the tried-and-true gospel.

Google made one difference: it turned ‘keywords’ into ‘rank’. Keywords, in the search engine world, refer to the method that early search engines undertook. They would take the words supplied by a viewer, and then scour its library for instances of that word,

with no specific order or correlation. The fears of inaccuracy are obvious, whereas a search could easily produce undesired results; e.g. results for a search on Barry Bonds, in the basest form, could lead a user to a San Francisco bail bond supplier. While not overwhelmingly common, it is likely that early insecurities over confusion led to the results of Rousseau and others.

The concept of Google is completely revolutionary as compared to these keyword searches. The result to the power search of a user that takes place on Google is literally all in the formula: a complex mathematic formula that the relevance of a webpage to the search that was queried was directly correlated to the number of other pages which made a link to the page. This process produces a rank for the webpage, and, when coupled with page content analysis, the pages which are the most relevant appear as the results of the Google search. (Friedman 2005)

The revolutions of Google's searching methods have produced much more than the misleading results of its predecessors, but reliable answers, to an information seeker, and thousands of companies set on uncovering the power of the search engine. The other element that exists concerning utility involves much more than the ability to locate knowledge, but the ultimate potential to do away with the insecurity. If Google continues on its current trend it will, eventually, clarify many more areas of doubt. Potentially, this poses a large threat to the traditional media community. The advantage of efficiency and access that the internet and interactive media always are gaining was always accompanied by a caveat of doubt. If Google is the answer it will go a long way towards demonstrating how the internet can displace traditional media as not merely an alternative, but a reliable, central source for information.

In the terms of the rest of this study, each peg of the internet would have an affect on another. That is to say that, as Google helps create more credibility for the World Wide Web as a whole, information could become more reliable. The major research questions of this paper explore whether forces outside of interactive media, whether they be in terms of preexisting notions, use habits, or supplemental media, have an effect on the method and paths of interactive users. The main hypothesis posits that while traditional media is still considered a major factor, it and its high levels of presence, will have a legitimate influence over the method that most users take. It would be interesting to note, in other studies, if expectations of the effectiveness and reliability of the internet as a whole also work as a factor in the main portion of predicting how a user approaches time-sensitive, regional, or major news stories.

III. *An Interactive Agenda?*

The media, over time, has been relatively successful in presenting a rational, but limited, scope of its news and information to the public; a product of the simple, yet unavoidable, simple constraints of traditional media. A 30-minute newscast, five-section paper, or hourly radio updates have an expansive coverage of the majority of news. The enormous growth in the last ten years, specifically in the field of 24-hour, all-access media, has caused several things. The rise of technology may be one of the greatest contributors, and it may best be demonstrated by the rise and use of interactive media in recent years. The newest forms of interactive media may be able to surpass the limits present in previous technologies, allowing the consumer to take more control, potentially allowing them to avoid the media devices and let them use the media in the manner which they see fit.

Whether in terms of presenting the news over a day or attempting to keep up with the dynamic 24-hour circuit, media (specifically news driven agencies) are forced to select what elements they want to include in their coverage. This selection immediately becomes an important part of news presentation, because, it inherently includes exclusion. To paraphrase from Bernard Cohen in a 1963 book, the media does not necessarily tell the public what the think, only what to think about. (Cohen 1963). Cohen was referring to a theory, researched greater in depth in years to follow, that became known agenda setting. Because of what the media present, they begin to propose a specific outline which, ultimately, becomes the arena for public discourse. From a media stand point, there is a great amount of control that comes from knowing that it is possible to affect discussion. It offers opportunity to almost create an agenda that would be

favorable to the fields of public relations or advertisement. Initial studies of whether or not this happened attempted to outline if what the public was talking about was what the media was covering.

One of the reasons this occurs is that the media is greatly responsible for how information is covered. In terms of controversial political or social issues, there is a socially constructed expectation that the media will inform the public of the situation. Even if it is unintentional, there exists a power of the media to perpetuate conversation and discourse through its coverage because of the attempts to regulate those agendas. Once it was understood that the effects of media are not immediate, powerful, and uniform, it was important to continually investigate its sociological effects. It was best, then, to return to its basest use: news. In a single day, there are innumerable events which could technically be considered news. The limits of media, though, cannot cover every one of them, and therefore news becomes highly selective. It is impossible to cover the news, only what is newsworthy. The natural constraints of hard forms of media (those in which the interactivity of the user is limited to the ability to stop using it) mean that certain newsworthy events become stories and others do not. Events are selected based on their importance or interest to society.

The biggest change caused by the trend to interactive media is the most unavoidable. Interactive media relies on a completely *active* audience. The information seeking nature of this form rules out any possibility of passive consumption, therefore, content, as well as advertisements, need to adapt. There is now an endless amount of control granted to the user. The idea of a “front page headline” or “lead story” carries over, but not in the same way it has in traditional forms of media. Media has had to adapt

to the changing role of the consumer because they know it is much more difficult to keep the user looking at what they want them to look.

Early research in the field of agenda setting has been closely tied to political ideologies. These seem to be the most important topics of the 1960s, specifically through the work of McCombs and Shaw. The initial study followed a sample of voters through the 1968 presidential election, what they believed was important in terms of issues and how those issues were covered in the media. The collection was small, but, it did illustrate that there is a correlation between the media emphasis on certain issues and voters' perceptions of issue relevance (McCombs & Shaw, 1972).

When addressing previous research on this topic, it may be best to look at studies done before the rise of interactive media, at least as a starting point. In order to understand how agenda setting has changed, it is important to know where it originated. The vast majority of these studies focus on agenda setting within the media in terms of politics. This is likely because of the prevalence of discourse available outside the media on such topics, they are often much more easy to quantify. From the earliest research on, this has certainly been the focus. This is most evident in the earliest of research, explicitly the work by McCombs and Shaw that was alluded to earlier in this piece. Viewed as one of the initial studies into the tests of how the media correlates with public opinion, the study began with a pretest to determine the source of political information. It outlined the information that was provided by the media in a group of 7-9 sources. These were categorized as either major items or minor items, depending on their prominence or placement by the media (McCombs & Shaw, 1972, p.178).

McCombs and Shaw discovered a few things. First, in terms of a content analysis, they were able to get an understanding of what the media was presenting. While their initial idea was to uncover ideas about political issues, they determined that the coverage was "not devoted to discussion of the major political issues but rather to analysis of the campaign itself."(McCombs & Shaw, 1972, p.179) They also provide evidence of a correlation with the frequency of major stories and the majority of public opinion. Does this categorically demonstrate a direct link between the two? Perhaps not, but it does indicate some sort of relationship.

One particular set of analyses may be helpful in trying to determine whether or not interactive media has made it more difficult to establish a strong tie. McCombs and Shaw mention selectivity as one determining factor as to when there may not have been as much relationship between major stories and the individual's ideology. Within their study, they were attempting to question previous political leanings, displayed by political party affiliation. They say that there would be a strong link between these individuals who select to focus on issues more oriented to their party and the news/opinion on that party. (McCombs and Shaw, 1972)

This idea evaluates the ability of a consumer to choose based on personal preferences and establishes, at least the notion that the more active the audience is, the more likely they are to determine their own media preferences. Like politics, sports carries severe regional and local loyalties, if not more so. Therefore, the spectrum of selectivity is initially much wider. This is especially interesting when the role of the consumer in interactive media (i.e., completely active) is considered. The McCombs and Shaw study highlights the lower matriculation rate to media from those who are more

selective. The possibility of a severe shift in the media's agenda setting role, as caused by the boom of interactive media, becomes more likely.

One of the biggest clarifications require to understandings associated with agenda setting was emphasized first by Cohen, but continued by McCombs in a later study. As he says, "Agenda-setting is about the transmission of salience, not the determination of opinions pro and con about a particular issue." (McCombs, 1997, p.433) This is a pillar of the theory: that the role of the media is not (and, effectually, it does not) determine what the public model is, but it does present the stories that will be discussed. McCombs attributes this to the role of the news media to focus public attention in the attempt of creating consensus. Yet, he does outline the potential that there may be a limitation:

> "If an issue does not resonate with the public, it will not appear on the public agenda regardless of its prominence on the media agenda. There are agenda-setting effects of news coverage, but these effects do not inevitably flow from news coverage. The public and the news media are joint participants in the agenda-setting process" (McCombs, 1997, p. 437).

The application of this is the continued acceptance of the fact that there is no complete control of media, and, there are several factors which continue to establish the role of the audience within the agenda-setting. To reiterate what McCombs stated, they are joint participants in the process. Even when they are just mildly active or even active consumers, there is at least some notion of the individual inherent in the idea. When the media participates in their agenda setting role it is, by no means, a categorical

denunciation of the agenda of the audience. There is no reason to believe that they cannot peacefully coexist. The audience can only go so far, though, into what they believe to be their own agenda. This is another reason to anticipate changes in audience responses when they are given much more ability and reign within media.

The rationale behind this stems from the process in which agenda-setting can even occur. Sei-Hill Kim, Dietram A. Scheufele, and James Shanahan (2002) offer insight. As already discussed, the media has some success in terms of creating a realm of consensus or discourse, but it is not done forcibly, only through the vehicle of accessibility. Media is effective because it promotes a limited number of issues. Yet, the manner in which they do so, because of the prominence that this limit creates, promotes those limited stories. It generates a perceived salience to the audience, as Kim, et al., say, "it is essentially an argument limited to the frequency with which issues are portrayed." (Kim, Scheufele, and Shanahan, 2002, p. 9)

This understanding also needs to be applied to interactive media. If there is an issue with frequency, there are many more things to consider using the expansive coverage of the internet. Stories are not only more plentiful, but it is possible that repetitive habits increase frequency for everything. Therefore, the things that become the most notable are the things that are constantly changing, not the things which are notably high in frequency. In fact, there is even the possibility that high frequency may cause the opposite; through over-saturation, caused only by how the media is used, those items may be downplayed.

These studies, though, are limited to traditional media, for the most part. Only recently have studies begun to move away from the traditionally bound ideas of Agenda

Setting, Salience, and Primacy as they only apply to print or televised sources (Roberts, Wanta and Dwzo, 2002; Aikat, 2005; Lee, G., 2005). It is important to think about interactive media (also referred to as computer-mediated communication, or CMC) and its changes in different terms than previous technological shifts in media. Fundamentally, there is no breakthrough in terms of the actual medium; the World Wide Web is just a re-presentation of traditional media combined in a new atmosphere. Radio added sound to newspapers, while television complemented that with pictures and video. The internet offers no new service on these terms. The change is in how the audience becomes an actual part of the medium; an interactive force that determines how these words, sounds and pictures are presented.

The studies listed above are important in terms of a historical perspective, laying the ground work as the New Media comes to the surface. The change, though, from traditional media to interactive media is dependent on the audience. Traditional media limited a user's interaction, for the most part, to an on-off switch. The practicality of previous studies is called into question as the audience changes, because these studies relied more on the programmed response to traditional media – i.e., the traditional sender-message-receiver model of communication study.

Initial studies into new media recognize that they are not independent. It is often noted that there are outside forces which play a large factor in internet discussions of everything from health care to taxes; according to one study, those who are likely to take part in significant interactive discussions are also likely to be well read in current events. This phenomenon, in turn, produces a reinforced example of the coverage in traditional media. (Roberts, Wanta and Dwzo, 2002) The study identifies an intellectual community

present in the World Wide Web, limiting their research to electronic bulletin boards with social and political agendas. The connection between this community and those who consume highly intellectual media of traditional forms is apparent, which could explain the results of the study.

Roberts, Wanta and Dwzo (2002) point to the lasting salience of major social issues from main media sources and how they resound within the realm of interactive media. This furthers the point that interactive media cannot truly be viewed on its own; it is ultimately a complementary media, at least for now. Given the opportunity, the possibility exists that different forms of media can displace or replace traditional media, a concept examined by Dimmick, Chan and Li (2004) as 'Gratification Opportunities.' This displacement, though, would require there to be some sort of gain that the newer form can offer than the other cannot. The driving opportunity in interactive media is simple: its immediacy.

Other studies (Tsao and Sibley 2004; Ferguson and Perse, 2000) along the same lines examine the possibility that this is dependent upon a 'functional displacement' factor, that is to say, once the new form of media becomes capable, it is more likely to work against standing media. Over the past years, the internet has tentatively proven itself to be an acceptable alternative, but much more so among younger people. This phenomenon was noted during the 2006 Winter Olympics by Levy, Higgins and Lachlan (2006), as a study of college students revealed a negative association between the number of hours watched of the Torino Olympics and the amount of time spent using outside sources for information about the games.

Roberts, et al, were at the forefront of the revolution in interactive media. Google had not made its mark, and internet news agencies were still growing and heavily reliant upon traditional media. They do remark though, that, while there were trends within the media toward a certain story or opinion (perhaps one of the New York Times), they did not test against whether the reader was basing their response on a print version or the electronic. (Roberts, Wanta and Dwzo, 2002)

Research concerning this blending of media was developed by Aikat in a 2005 as he connected coverage of the 11 September 2001 terrorist attacks with trends in both traditional media (based on print resources) and an analysis of some internet outlets (specifically the aforementioned power search engine Google). The search engine successfully outlines the internet agenda because it is the snapshot of information seeking across the 250 Million Users that the source offers, and there are definitive correlations of presence within interactive and traditional media if an event of major occurrence, such as the 11 September attacks, occurs. Before that event, there was little congruence. (Aikat, 2005).

Meanwhile, while the major event did cause some centering because of coverage in traditional media, it did not completely remove independent web queries. Even during the week of the attacks, Aikat (2005) was only able to attribute 80 percent of the Google searches to the events associated with 11 September. This was during a time when traditional media was fundamentally dominated by the story. The complementary nature of the interactive agenda was still in tact, but, there was also room left for other transgressions. The internet can have its own agenda that is not dependent upon

traditional media, especially in smaller scale news events. Instead of similarites standing out, even mild variation is worthy of notation.

An obvious transition from this point would be directed towards the different issues of presentation, specifically priority. Even among the same source, outlets that carry both interactive and traditional media still experience a wide range of difference. This abundance is caused by one simple difference in the technological aspect of new media:

> "More variables are now involved in information delivery of an Internet newspaper, including information structure, presentation style and navigation path. The way that a story is accessed is undergoing a fundamental change from simple linear route to more flexible access routes" (Li, 2005, p. 20).

Li uses this conclusion, along with basic research into the presentation of interactive news outlets, to explain the production of a different priority listing for internet sites over print forms of news. The same cues and explanations of priority are present, as issues of Breaking News or lead stories are coherent between the two sources. (Li, 2005)

There are other implications of the internet that are not dilemmas of traditional media, in research terms. While some traditional sources (major newspapers, cable news channels) do carry national audiences, they reach neither the breadth nor depth of the internet, where, ultimately, a page is consistent in content terms from Topeka to Timbuktu. It fundamentally creates a terrain which is immensely massive, bound only by

access and not by region. The concept of a massive market has begun to be explored in other realms, specifically as it applies to global events of the sporting world.

Sports and Media

There is a highly casual level of consumption in terms of internet usage, which needs to be understood in order to understand previous research (Lee, Choi & Lee, 2005), as well as the aforementioned research. Lee, Choi and Lee analyzed the response of the online community to one of these such events, the 2002 World Cup, through outlets such as Google discussion boards, as well as those of ESPN. There was low presence of the event on mainstream media (ESPN held live broadcast coverage on their secondary network, ESPN2), and only in major news outlets of traditional media was there a strong presence. They concluded that the amount of coverage through traditional sources positively related to the amount of discussion in interactive discussions. (Lee, Choi & Lee, 2005)

Sports have found their home in basic media channels since the inception of mass media, but, there has been a significant boom in the last 25 years. From an era where the sports section was simply a portion of the newspaper to the days of 24-hour sports news channels and complete viewing access to games around the world, there has been an infusion in the last quarter century into major social channels as well. Sports offer a very different response in terms of media, especially because of the dependence that they have on live, televised coverage. Televised sports benefit the most from live programming, as examined by Rausenbjerg and Sand (1998):

> "Such [live] transmissions also elicit the greatest degree of fascination – both on the level of reception and in purely aesthetic terms. Ratings around the world are unanimous: live transmissions of sporting events attract by far the largest audiences. They are mainly international contests, e.g., the Olympics, World Cups and European Championships" (Rausenbjerg & Sand, 1998, p.159)

In the world of Sports media, presentation relies on main stories and breaking news as much as traditional media outlets. Except in the most limited cases, these stories originate in print or televised media and then continue to the new media realm, developing it to be a complementary role for interactive media. Studies do not conclude there to be a direct result, instead viewing new media as a second-level agenda instead of an outlet from original content (Lee, 2005).

What this study may fail to recognize is the possibility that the internet can be built on much more than a second-tier to the agenda of major news outlets. The obvious hindrance to this development is the possibility that either (a) interactive media use is simultaneous or (b) independent of traditional media, reducing it only to its dependencies. If that were the case, then there would be very congruent and consistent responses across the board, regardless of time lapse or user. Just as the Magic Bullet theory was ruled out largely because of individual differences, technological differences and individual opinions can be expressed to greater extents across the internet and, therefore, offer more impact against the nature of a traditional agenda.

The user attains a wide reach of columns, stories, and sources, all of which are accompanied by myriad statistics, message boards and box scores previously unattainable due to space limitations in print media. Greater technological developments have allowed

users to click and point their way through shows – fast-forwarding only to stories of interest on live television. Customization gives the user the opportunity to determine what content they want to see in terms of their favorite teams and sports, potentially even skipping headlines of major events.

Through response to major sporting events and news during the summer of 2005, the following study is designed on the following hypotheses:

H1: There are only predictable complementary usages of interactive media if a stimulus of traditional media is offered. Otherwise, the range of selectivity will offer no predictable use.

H2: Further, if inconsistencies are still present even among a stimulus group, users who are more adept at internet use will likely be the ones who can avoid the presence strategies of previous media to create their own agenda.

Internet Navigation Choices and Primacy

Considering the high level of selectivity created by interactive media, the previous success that the media had in creating an agenda of public discourse and ideology may be hampered if the interactive agenda is viewed in the same ways as traditional media. The evolution of technology has made the audience significantly more active, and, due to a greater range of selection, they may be able to avoid the majority of the agenda put forward by traditional media. This notion would not be upheld or explainable in terms of traditional media theory and likely be unpredictable. Any theory that attempts to explain the use of the internet relies, therefore, on a connection with previous methods and media as interactive media attempts to further their discussion.

The study that follows attempts to investigate these assumptions through hypothesis one. If confirmed, this would bolster the debates of displacement and replacement theory within the realm of interactive media. If disconfirmed, this could perhaps be construed as further evidence of displacement, potentially a legitimate threat to print and televised media.

In either case, there are ramifications that rely on presentation, placements and media forms in general. The physical construction of a source, whether traditional or interactive, has significant weight in determining what a user perceives. Broadcast and print media have made it fairly easy to recognize what could be considered a main story, and interactive media attempts to do the same. The question may involve, though, elements which fall outside of these positioning tactics. The form of the media itself has not previously had to conflict with how a user chooses to view it, whereas interactive

media introduces the concept of customization. All of these factors may be explore by this study.

The results may indicate a successful complementary relationship that acts as a bridge between traditional and new media. This would suggest that programming and content to be driven towards a common ground that would be easily connected. On the contrary, a non-existent relationship on a content level would suggest the need for more uses and gratifications research in attempts to further the discourse. This is primarily addressed in hypothesis two.

Method

Materials

The focus of this study is the presentation of certain "news" type stories within the realm of sports media. This does not include recaps of games or events, but instead focuses on what would be considered newsworthy events that occur alongside of main sports stories. This avoids the conflict of live broadcast events within televised media, where there is no real comparison to interactive media. Effectively, traditional media and interactive media offer the same information in different forms in these scenarios. Because this is much too broad of a spectrum, it is important to narrow it down to one topic. In the current study, sports information is offered as one example of information that may be available from multiple sources.

One of the most talked about issues in professional sports involves the use of illegal, performance enhancing drugs, and the sport most in question has been professional baseball. For a good portion of the last three years, one of the most pressing

issues has revolved around the idea of prominent athletes in the sport who use steroids to enhance their ability. Sources ranged from print media (which documented thousands of stories concerning everything from drug tests to the athletes who were using substances) to televised specials and in-depth news coverage, to the interactive outlets which complement them.

In choosing a media artifact to use in the current study, the researchers used the ESPN network and their interactive counterpart, ESPN.com. According to the official Media Kit released by ESPN.com, the webpage receives 1.3 Billion page views a month, by 15.1 million unique users. Its prominence, in terms of creating discourse or conversation, is almost undeniable, also considering the relationship it has with traditional media and the ESPN networks. Those networks are continually rated high in perceived value by users, advertisers, and operators. As previously discussed, within the realm of sports media ESPN offers both a traditional and interactive outlet for information concerning major news stories.

In order to concentrate on the story, a study was designed that attempted to most accurately reflect reliable internet navigation choices. While technologically limited in screen capture facilities that would have tracked a user's actual page usage, the researcher chose to steer away from this method because of fears of social desirability. This is to say accuracy would be impacted by the overt nature of collecting data with means that would instill a lesser degree of anonymity. Because of this logic, the researchers chose to use a printed, page version of the first page of ESPN.com (accessed August 2, 2005) that incorporated a major story that involved steroids and major league baseball. The main news item of the day involved a popular player (Rafael Palmeiro) who had recently been

in the news for his career achievements, but had also just been found with detectable amounts of performance enhancement drugs during a test screening.

In both the interactive coverage, as well as traditional televised coverage (in this case, ESPN's *SportsCenter*) the story was given both prominent location and size. Of the first three minutes, it accounted for over two minutes of *SportsCenter*'s coverage, while the front page of the web included nine links of the sixty-seven most recognizable links (as indicated by the researcher) devoted to the story. All of these links were in what would be considered "headline" roles in terms of placement.

Procedure.

Participants. The sample size consisted of 131 college students at a large university in the Northeast, who were each given a two-part, close-ended questionnaire that focused on self-reported preferences for media usage. Other data was also collected concerning personality traits and other signifiers that may vary according to immersive tendencies. While the front data was collected, it is only in terms of pilot data to explore significance across a numerous other factors outside of use and preference statistics concerning media that may not be related with the study. All research subjects were undergraduate volunteers, receiving credit for any number of classes offered through the department of study. The 131 participants were nearly equally represented in terms of gender (42% male, 58% female), but skewed heavily towards a dominant Caucasian ethnicity and higher family income levels.

Pretest measures. Participants were asked to provide answers serious of questions which were concerned with consumption statistics and means. Users were asked to report

their usage rates of both television and internet media sources. Instead of asking for a weekly estimation, the study broke down the week into four different parts, each with three time periods for the subjects to report their consumption totals (in hours) more accurately. This was done in order to provide a more accurate representation of what each individual was actually consuming.

Another portion of the pre-test asked for users to reply to a small series of questions concerned with general sports interest. This was done in order to see if there would be any congruencies among those with similar levels of sports interest. During this time, demographic information was also collected.

Outcome measures. The ultimate section of the survey relied on a screen capture image of the ESPN.com home page from 2 August 2005. This page was not simulated on a computer screen; it was printed on paper (like the rest of the survey) and accompanied the pre-test questions. There no alteration to the original webpage, except for the addition of 67 numbers placed according to what could be considered "links" on the page if it were presented in an interactive form. The numbers were not arbitrary: the researcher numbered them so that they would deviate from the center based on position. The most center link on the page (labeled 39) was the story with which the researchers were most concerned.

Using this pattern, the links were numbered so that deviation scores could be calculated by taking the absolute value of the value of the identified link subtracted from 39 {ABS (39-n)}. As an early study, trying to understand the subjective links between choices that were distant from the center would have been complicated. The researcher

chose this technique in order to best approximate where deviation was occurring in a measurable term.

Results, then, for this portion will emphasize the relative distance from the center point for user selection. Given this page, each participant was given a prompt which asked them to indicate the three numbers which correspond *best* to the links you would be the MOST likely to visit in order of priority. This data was reported as lin1, lin2, and lin3, representing the first, second and third choice for each participant. This data was then manipulated so that it was recorded as the distance from the center, in this case when lin1, lin2, or lin3=39. These variables are labeled |lin1|, |lin2| and |lin3|.

Laboratory procedure. Participants were randomly assigned to one of two groups. The first group was designed as a control; an effort to identify media preferences that may exist without the presence of other media in the environment. The study was conducted six months after the original event took place, hoping to use the distance of time to further separate the results from the congruence of traditional media. After filling out the pretest, each respondent was asked to identify the three numbers on the screen capture print out (out of 67 possible choices) which best indicated, in order of preference, the three links which they would likely access. This group was assigned condition 1 and will be referred to, from here on out, as the control group (C1).

A second group of similar size was given the same survey, with no variation between groups in the instruments that were used. The difference with this group was that before asked to report which links they preferred, the respondents were asked to watch a short video. This video was a clip of the televised broadcast of ESPN's *SportsCenter* from the same day that the screen capture was taken. The clip was heavily weighted, in

terms of content, towards the major story involving Rafael Palmeiro, and it included in an opening teaser referencing other stories that were on the webpage. The clip was a little over three minutes in lengths and concluded at the first transition after the main story. After the group had seen this clip, they were asked to complete the final portion of the survey, reporting the links which they would likely access. Because of the priming agent in the second condition (the *SportCenter* clip), the group was labeled as the stimulus group (C2).

The critical data gleaned from each group is the consistency or inconsistency between groups in terms of reporting which stories they would access. In terms of evaluating the groups, it is necessary to center the responses around the main story of the televised broadcast, as to create a focus point of the study. This allows the results can be evaluated in terms of the physical position of the links on the page. For this reason, the links were numbered with the most extreme numbers also being the furthest from the center, main story (see above). Therefore, the analyses are designed to examine deviation from the main story on the web page in terms of the mean distance from the center and the mode of the most common responses.

Results

Usage Statistics

One factor which may have a play in the results of the study would involve general interest in the specialized media for sport. This led to the development of a scale, based on response to four questions that would help to objectify the likelihood of an overall connection of the individual to sports and sports media. Based on a likert scale,

nine point response with 1 being very interested and 9 being not interested, the subject reported their score for a series of responses. These questions asked for general interest, interest in playing, interest in watching, and tendencies towards live or mediated broadcasts of sports. A score was given, and the average of the questions can be used to determine a preference for sports media. This nearly always positively predicted the amount of hours of sports watched, based on user response (see Chart 1).

This score was used to investigate the general interest of the sample. The group trended towards a high interest level; statistics indicate that the mean centered on a score of 3.7328, with a mode of 3, and median of 3.5. The result was slightly skewed from a normal curve towards the high interest level, with outliers creating a normal kurtosis and presenting no distribution-based threats to the use of inferential statistics.

Navigation Choices

T-tests show fail to reveal significant differences between groups C1 and C2 for all three sets of deviation scores (see Table 1).. In both the control and stimulus condition, the link that the subject indicated as their first priority (|lin1|) was not often around the central point. In fact, it varied fairly far from that central link (C1=17.5636; C2=16.1379).. These numbers reflect, in terms of position, that the majority of the links chosen were likely unrelated to the central story. The medians for |lin1| were identical (16.0000) for both C1 and C2.

In evaluating the |lin1| response for C1 standing alone, there is also no clear mode. The statistical mode occurred when |lin1| was 14, but there were also comparable modes at 0 and 10 (see Chart 2). The reported scores were adjusted based on their distance from the center point. The link which corresponded to the center point was the

choice labeled ’39,’ therefore, |lin1| (reflecting the corrected score) could potentially represent two numbers. That is to say, if |lin1|=14, it could represent both lin1=54 and lin1=25. There is only minor kurtosis and skewness towards the left. The same responses for C2 offer very different results (see Chart 3). The graph of |lin1| for the second group is heavily skewed (.130), with a substantive kurtosis of -1.589. The mode, once again, was |lin1|=0, but, in this group, there was no response that had even $1/5^{th}$ of the frequency of this most common response. Over 20 (nearly half) of the stimulus group reported that they would have chosen the main story as their highest priority.

There is also interesting data in these terms for lin2 (the link which subjects responded would be second in order of preference). While there was no statistical difference between the two groups in terms of mean response ($p<.990$, *n.s.*), there is a notable data in terms of the frequency of responses. As with lin1, there was no real difference in terms of mean or median, but significant difference in the charts and graphs based on their response. There is heavy skew and kurtosis, again, in the second group (C2) around |lin2|=29 (Chart 5), while there is no trend at all among the first group (Chart 4). In both C1 and C2, significant differences in the mean deviation scores for lin3 were not significant ($p<.876$, *n.s.*).

Discussion

The initial hypotheses challenged what might happen when new media is used in conjunction with traditional forms as a complementary agent. Preliminary results offer some evidence that, once a strong connection exists, users are likely to consume

interactive media in a way similar to previous media. The absence of traditional media in the first group was appears to be responsible for producing erratic results (especially in secondary and tertiary responses). There was minimal convergence around the main topic in comparison to the overwhelming skew in the stimulus condition. This evidence leads lends some support to the intitial hypothesis: when viewed as a complementary media, the internet (as well as other forms of interactive media) can be understood in terms of some traditional media theories.

There is not, however enough statistical evidence to provide support for hypothesis two. These results seem to indicate leads to the notion that media can be successfully predicted when complementary. Therefore, further data is required in order to conduct a suitable examination of this phenomenon

Of particular interest is the analysis of |lin2| for both groups C1 and C2. The amount of variation was severe in the case of the control group, with multiple modes and a curve that is far from normal. Yet, in the case of the stimulus group, the presence of a highly modal curve suggests the possibility of another, unseen catalyst. While the researcher expected there to be a trend towards the primary story in the highest priority selection (i.e., lin1), any further continuities were not considered. Upon further evaluation, the link which was the center of the second preference seemed somewhat related to the main story. The content, though, was not the reason that this link became the second focus.

The original movie clip that was shown to the participant was left unaltered, so it included the full three minutes from the very beginning of the broadcast of *SportsCenter* on the day in question. Each episode of *SportsCenter* begins with a montage of the days

main stories. On August 2, 2005, it mentioned the Rafael Palmeiro headline prominently, but, within that 25 second introduction, there were also references to Barry Bonds (another Major League Baseball player under speculation for steroid use), College Basketball, and the National Football League. Yet, of these other stories, none were given real prominence on the ESPN.com screen capture. This leads to speculation about why, as a second priority, participants exposed to the stimulus significantly gravitated towards a story on Barry Bonds while there was absolutely no trend in the control group.

The first highlight in the opening montage in this broadcast focused on Barry Bonds. The trend towards this minor story as secondary preference, while the content and topic is similar to that of the main story, it is likely more a cause of the presence in televised broadcast. It is essentially primed because of the placement of the story; the lack of consistent responses in the non-primed group indicates a force that goes beyond the main story and headlines. Results in C1 may be changed because there is no suggested order of priority, which means that a user who would still consider the two stories in question may have selected them, yet without suggested priority there would not be a noticeable trend. Perhaps it is in this manner that traditional media plays the largest role.

There are some identifiable limitations in the study, among them the paper-based stimulus. Within web based research gathering, there are negatives in collecting either through an interactive simulation or a reprinted version of the information. While it would be ideal to use screen capture software, the researcher of this study chose to avoid it because it may create a high level of social pressure due to a less-secure sense of anonymity. The choice to use a paper-based screen capture, while avoiding this dilemma,

it was not as ecologically valid as possible. Further research should try to find a way to successfully monitor actual web use in accordance with a study in a similar method.

Another potential limitation of the study is its focus in one specific area of news media. Sports-based media offer a glimpse at one realm, but this is only a miniscule content area given the breadth of internet sources and outlets. If more research is conducted in this area, it would be interesting to apply it to other news agencies, or perhaps even non-news resources (special interest or entertainment), that would offer a greater look at more of the seemingly infinite realm of interactive media.

Conclusion

Over 40 years ago Bernard Cohen claimed that the media did not tell people what to think, only what to think about (Cohen, 1963). To rework his idea, the media may now tell people what to think about and in what order: and sometimes they may not want to do that. It appears that the previous work in agenda setting looks can begin to look at the order in which media is consumed, and that road map becomes very important in moving forward. Individuals will still consume media on the internet, without prime, that reflect main topics, stories and ideas. As long as they do that, the media can still direct their appeal with that in mind. The only difference though is that interactive media is not linear, in the vein of traditional media. In order to continually direct the audience toward content and topics, media should perhaps compound what it understands about its old tactics to create a new direction. Utilizing the internet as a complementary media makes this possible.

There are many different ways that the internet (and other interactive forms of media) functions. This paper only examine a small portion of that by looking at ways that the internet operates as an extension of traditional media and other parts that have developed new methods. Within this discussion there are a series of queries which hopefully lead to greater conversations about the future of interactive media and the theories that apply to it.

If interactive media focuses on filling in gaps in other media, trying to provide something that those sources cannot, thaen in accordance with theories like uses and Gratifications it will succeed. How the internet will adapt to those advantages at its young age is still unclear, but it will certainly rely on using the instantaneous flow of information to continually offer the most recent information. This will fundamentally affect the news production world. In years to come, the internet will become a greater player (even more than it currently is) in the 24-hour news world. Its application to sports is only more evidence for this. The internet has created an outlet where the suspense of the game can overcome distance to help uncover news as it occurs in a realm that relies on extra innings and overtimes.

Can media successfully continue their relationship in creating an itinerary for users to follow? If they are, they can continue to market, advertise and publicize in the same manners they have up until this point. However, not every major webpage has the advantage of complementary media, and will likely develop countermarketing tactics to combat those that do. To this point, it has not been demonstrated that there will be a shift away from complimentary media; the only thing that could fulfill that will be when interactive media can use its instantaneous, user-driven construction to gain leverage.

Radio became popular because it compounded the news of print with sound; television, likewise, complemented radio with video and pictures. Every single one of these transitions, though, was driven by media controlled dominance in technology. The user was still just the audience, accepting the change. It is elements like the Google Phenomenon, or the birth of Wikipedia, though, that may be the transition from those other forms of traditional media. This is another phenomenon that this study has attempted to explore. A fundamental change in the manner in which people search for information, or expect to find it, based on the results they have created themselves, could lead to a revolution in which information is not sought but expected. While it may be much too early to tell, in years to come the goal of the media corporation may not be to provide the means to search, but to be what is most sought for.

This development has been so important that, in recent years, companies have sprung up throughout the global community with one goal: helping corporations ascend to the top of search queries. Known as search-engine optimizers (SEOs), several different groups have attempted to tap into the formulas and keywords of power search bots like Google. They desire to control the search results of Google, hoping to be able to have some influence over how the audience is utilizing the media. New Media has sprung up a new form of advertising that does not involve commercials. Instead, it revolves around trying to be the answer to what the user wants.

This revolution is clearly driven by the audience. If the audience cannot find what they are looking for, now, they can create it themselves. They do not have to wait. They can fill in the encyclopedia, as with Wikipedia.. Instead of technology driving a revolution, if interactive media is to overtake traditional media in prominence, it will

require a militia of users everywhere. Interactive media is, as its name sake suggests, active. Millions of people are controlling the content of the web, not just large media corporations. Ultimately, the interactive world is only getting more active.

However the media community reacts will depend wholly on whether or not it embraces the changing audience. As interactive media continues to become more of a player in mainstream outlets, the adaptation or transformation which occurs becomes even more important. New media needs to be acknowledged as legitimate, though, because if traditional media outlets do not anticipate the change then they may be left behind.

Chart 1 – Sports Interests and Hours of Sports Media Consumed

The ranges indicated based on the amount of hours watched (y-axis) versus the assigned sports score for each individual. The sports score was calculated by the rounded mean of responses to the four nine-point Likert scale survey questions. This mean was rounded to create nine equally spaced groups based on the indicated response.

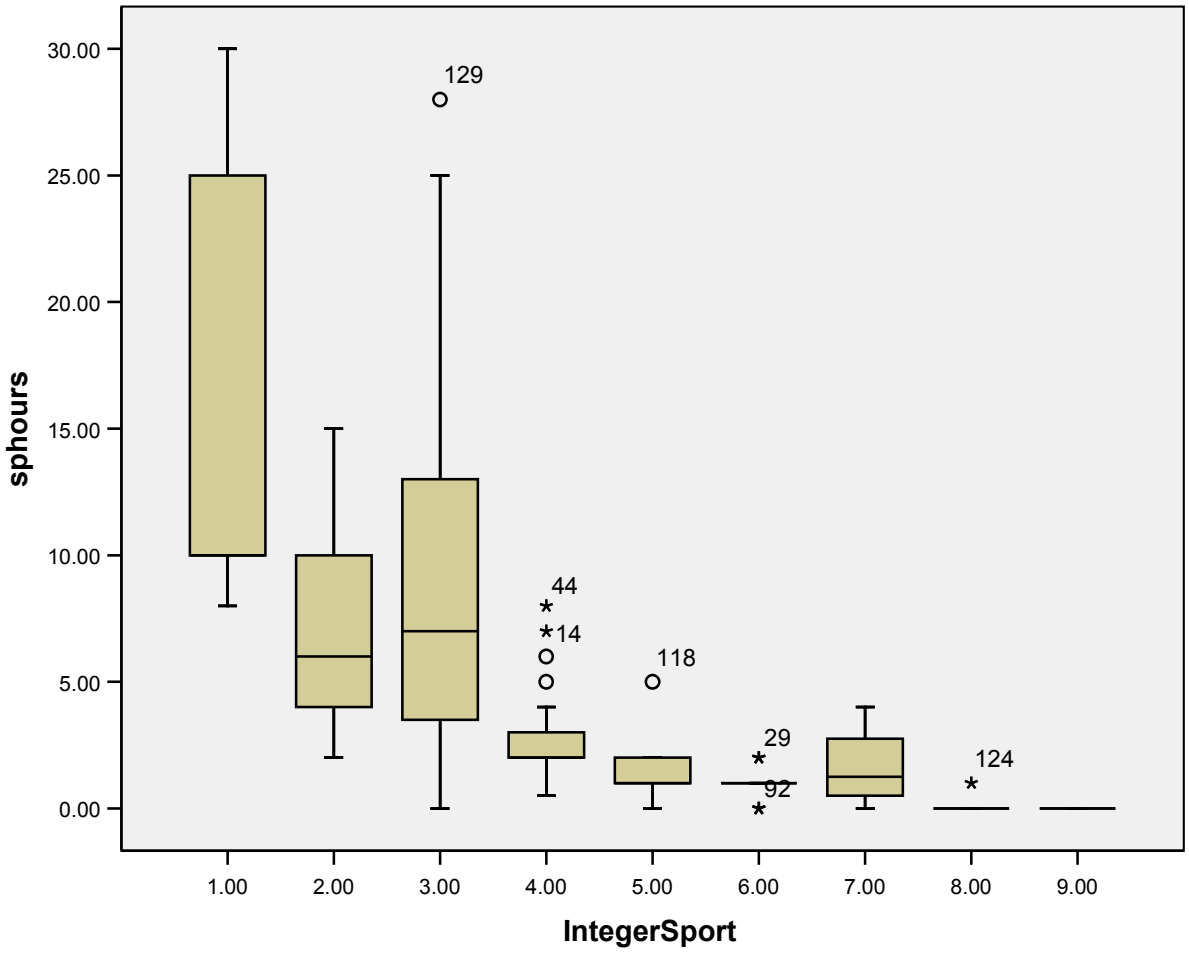


Chart 2 - Plotted response of group C1s highest priority link, in terms of its distance form the middle point (|lin1|).

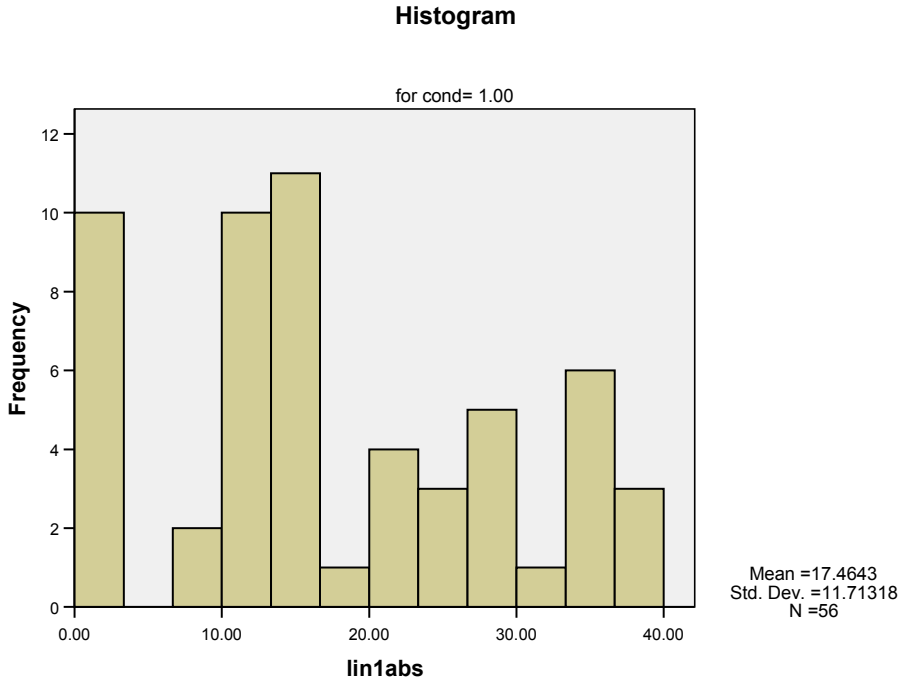


Chart 3 - Plotted response of group C2s highest priority link, in terms of its distance form the middle point (|lin1|).

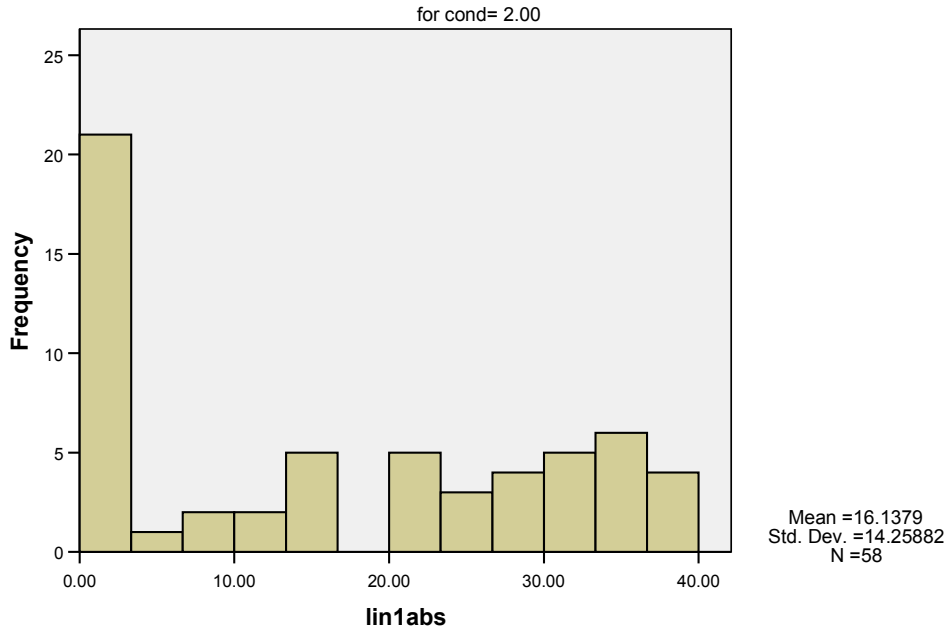


Chart 4 - Plotted response of group C1s second highest priority link, in terms of its distance form the middle point (|lin2|).

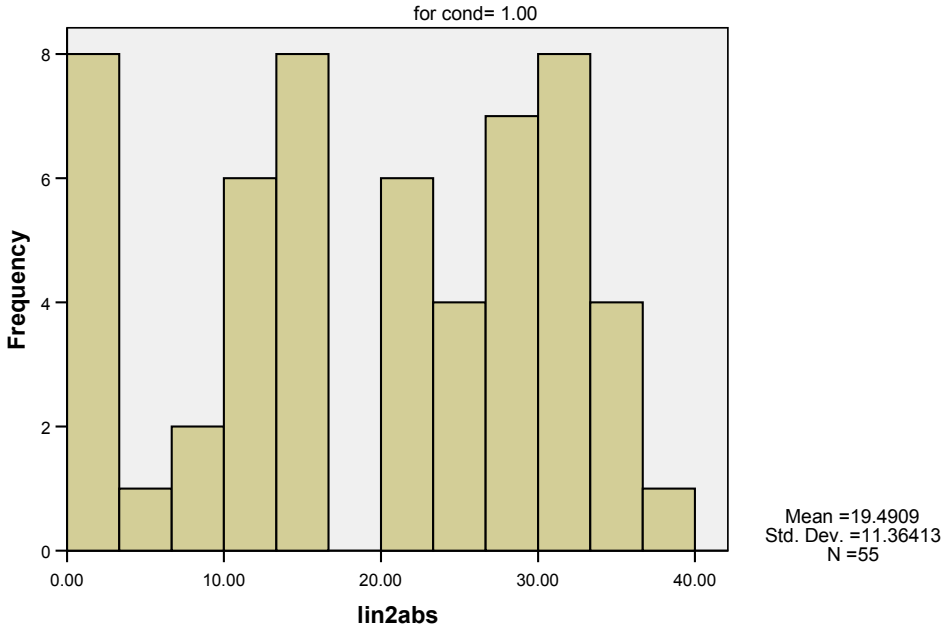
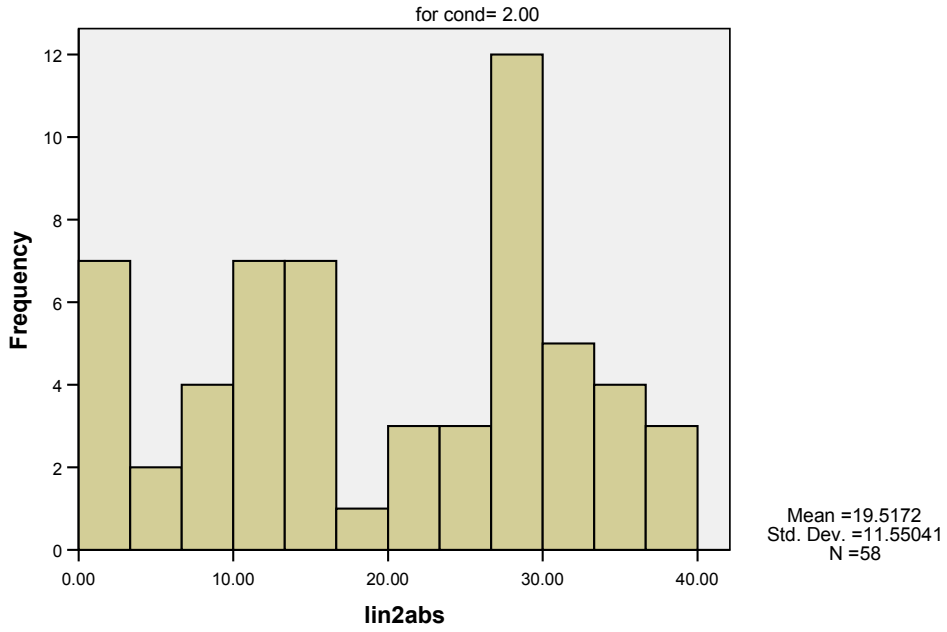


Chart 5 Plotted response of group C2s second highest priority link, in terms of its distance form the middle point (|lin2|).



Independent Samples Test

Table 1 – Mean Comparisons between Groups C1 and C2 for Responses to |lin1|, |lin2| and |lin3|

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
|lin1|	Equal variances assumed	7.103	.009	.542	112	.589	1.32635	2.44877	-3.52557	6.17827
	Equal variances not assumed			.544	109.225	.588	1.32635	2.44037	-3.51026	6.16297
|lin2|	Equal variances assumed	.143	.706	-.012	111	.990	-.02633	2.15692	-4.30042	4.24776
	Equal variances not assumed			-.012	110.845	.990	-.02633	2.15598	-4.29863	4.24596
|lin3|	Equal variances assumed	.051	.821	-.157	111	.876	-.30125	1.92076	-4.10737	3.50487
	Equal variances not assumed			-.157	110.236	.876	-.30125	1.92229	-4.11069	3.50818

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